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ABSTRACT

Considerable research has been done relating measures of teacher personality or attitudes to classroom behaviors, pupil achievement, and pupil attitudes. The major purpose of these studies has been to identify patterns of classroom behaviors, attitudes, concerns, and conceptual processes which characterize teachers. Fifty-one junior high teachers participated in a study of classroom organization by completing a questionnaire on teacher beliefs. Eight dimensions of teacher attitudes concerning educational goals included: subject-matter emphasis: personal adjustment ideology: student autonomy vs. teacher direction: emotional disengagement: consideration of student viewpoint: classroom order: student challenge: and integrative learning. Teachers also answered questions concerning class organization, instructional emphases, behavior management, and teacher concerns. Biographical data was also collected. The effects of teacher control, social-emotional concerns, integrative learning, and role separation on classroom techniques were examined. Results indicate that teacher beliefs predict classroom processes and results, but not in a simple fashion. A composite of several beliefs (high role separation, high integrative learning, and low social-emotional concerns) seems to be related to certain processes and results (high academic on-task behavior, high achievement, and low student ratings of teachers). A profile of teacher beliefs could be useful in predicting teacher behavior and management effectiveness. (CJ)

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The Relationship of Teacher Perceptions to Classroom Processes and Student Outcomes

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Abstract

Fifty-one seventh and eighth grade teachers (26 mathematics and 25 English) participated in a study of classroom organization in which they were observed extensively throughout one school year in two of their classes. At the end of the study, teachers filled out a questionnaire which covered details of classroom organization, instructional emphases, behavior management, teacher concerns, and teacher beliefs not easily observed in the classroom. Results include correlations of a set of presage measures, including teacher beliefs with a set of classroom processes and product measures, including management characteristics, student achievement and student attitudes.

The Relationship of Teacher Perceptions to Classroom Processes and Student Outcomes

Considerable research has been done relating measures of teacher personality or attitudes to classroom behaviors, pupil achievement, and pupil attitudes. The major purpose of these studies has been to identify patterns of classroom behaviors, attitudes, concerns, and conceptual processes which characterize teachers. These patterns could then be used to formulate descriptions of effective teachers that could be incorporated into preservice education and used to predict teacher behavior. Dunkin and Biddle (1974) proposed that:

> ...much of teaching is presumably coping behavior on the part of the teacher and is thus subject to beliefs held by the teacher concerning the curriculum, the nature and objectives of the teaching task, expectations for pupils, and norms concerning appropriate classroom behavior. (p. 412)

They suggest that a good prediction of teacher behavior in the classroom could be obtained by "finding out what the teacher thinks she (sic) prefers to, ought to and will do in the classroom" (p. 412).

For the most part, this research has failed to yield significant results in determining specific and distinctive features of the effective teacher (Getzels & Jackson, 1963). As Getzels and Jackson have noted, there are a number of problems in the search for characteristics of effective teachers. The first problem lies in choosing the relevant dimensions of teacher characteristics to study, namely which dimensions would be most predictive of teacher behavior: attitudes, beliefs about the educational process, conceptual systems, or demographic variables. Secondly, there is a problem in choosing instruments to assess these dimensions. Dunkin and Biddle (1974) noted that most self-report inventories up to that time were not developed

with "knowledge of the processes of teaching in mind" (p. 412). In addition, ratings of teachers by observers, principals or students were often considered invalid. As a result, neither self-report inventories nor ratings have been considered very accurate in predicting teacher behavior. A third problem lies in the choice of an acceptable criterion of effectiveness. The invalidity and unreliability of ratings has made them less desirable. Achievement and classroom behavior have been used as criteria, but appear to be questionable when used alone in determining effectiveness while ignoring context variables. The fourth problem Getzels and Jackson mention is the limitation of treating all teachers, young and old, male and female, elementary and secondary, as a single group. Important contextual variations due to the subject matter taught, the school climate, and conditions in the community are thus ignored.

Some interesting contributions to the study of teacher characteristics have been made by Ryans (1960) in the Teacher Characteristics Study and Murphy and Brown (1970) in their study of conceptual systems and teaching styles. Ryans was able to determine three patterns of teacher behavior which correlated with each other and with pupil behavior. These include:

> "Pattern X_o - warm, understanding, friendly versus aloof egocentric, restricted teacher behavior.
>
> Pattern Y_o - responsible, businesslike, systematic versus evading, unplanned, slipshod teacher behavior.
>
> Pattern Z_o - stimulating, imaginative, surgent versus dull, routine teacher behavior." (p. 382).

Pupil behavior in the classroom was not, however, found to be related to teacher attitudes. A different combination of personal and social

characteristics was found for elementary and secondary school teachers and, in secondary schools, differences were related to subject matter. A number of characteristics of effective teachers were identified, many concerned with intelligence, emotional stability, and outside interests, but some concerned with classroom processes.

Murphy and Brown (1970) studied teachers' conceptual systems and teaching styles, as manifested by ways of handling information and applying sanctions. In general, they found support for their hypothesis that conceptual systems could predict classroom verbal communication of teachers.

Another series of studies dealing with teachers' conceptual systems was done by Wehling and Charters (1969) who attempted to "identify the principal dimensions of teachers' belief systems regarding the classroom teaching-learning process" (p. 7). They did not link these dimensions to pupil outcomes or other criteria of effectiveness, but tried to determine the relationship between teacher beliefs and teacher behavior.

Wehling and Charters developed a questionnaire consisting of 86 forced-choice items, in a Likert-type format with either five or six response alternatives ranging from Strongly Disagree to Strongly Agree. The items on the questionnaire reflected eight dimensions of teacher beliefs concerning the goals of the educational process and their attainment. These eight dimensions include subject-matter emphasis, personal adjustment ideology, student autonomy vs. teacher direction, emotional disengagement, consideration of student viewpoint, classroom order, student challenge and integrative learning. All of these factors were uni-polar except for the student autonomy-teacher direction factor.

Some items on the questionnaire were associated with more than one dimension implying some overlap among factors.

While Wehling and Charters reported only those dimensions that emerged fairly consistently in factor analyses, they noted a high degree of instability in the factor structure of this domain of teacher beliefs. Subsequent work done with the Wehling Scales used only some of the eight dimensions (Charters, Note 1). A study was done by the MITT Project at the Center for Educational Policy and Management in 1974 using the dimensions of Subject Matter Emphasis, Student Autonomy vs. Teacher Directiveness, and Personal Adjustment. Test-retest correlations of teachers' scale scores on these three dimensions were done and the stability coefficients were relatively high (.60 to .73), lending some support to the stability of teachers' beliefs as measured by the Wehling and Charters scale.

The Wehling and Charters questionnaire was used in the Junior High Classroom Organization Study as one source of data on teacher beliefs. It was hoped that this information could be useful in understanding and predicting teacher behavior and management characteristics and thus be indirectly linked to the product variables in our study.

Methods

The data concerning teacher beliefs contained in this report represent only a part of the teacher self-report data collected with a 100-item questionnaire filled out by the 51 teachers in the Junior High Classroom Organization Study (JHCOS) (Evertson, Emmer, & Clements, Note 2). Besides the teacher belief inventory, teachers were asked to answer questions concerning classroom organization, instructional emphases, behavior management, and teacher concerns. In addition, some

biographical information was collected. The questionnaire took the teachers approximately two hours to complete.

Thirty-two of the original 86 items from the Wehling and Charters instrument were included in our Educational Opinion Survey (Appendix A). An attempt was made to choose an equal number of items from each of their eight dimensions describing teacher conceptions of the educational process. The items were randomly arranged on the form. Teachers were told that we wanted their opinions about teaching and its methods and goals. We also stressed that there was considerable disagreement about these questions and that there were no "correct" answers. Teachers were asked to respond to each statement by marking items on a 5-point scale from Strongly Disagree to Strongly Agree. The items were coded by assigning the responses a number from 1 to 5 with 5 representing agreement with the item.

Results

The 32 items from the Wehling and Charters teacher beliefs inventory were factor analyzed via a principal components analysis and eight factors were extracted. These factors were then rotated to fit the eight factor structure of Wehling and Charters. Because there was little similarity between the two factor structures, the 32 items were again factor analyzed and only factors with eigenvalues greater than 1.0 were extracted and rotated using the varimax criterion. Using this technique, four factors were extracted. Factor scores were created for each teacher by unit-weighting those items which loaded .4 and above on each of the four factors. The items loading most highly on each factor are listed in Table 1. Factor scores are characterized by the following descriptions.

Factor I: Teacher Control. This factor reflects a teacher's interest in classroom order and teacher-directed learning. The items loading on this factor are those which suggest a structured, "traditional" style of classroom teaching, where the teacher believes in taking an active role in the learning process and desires an orderly, task-oriented atmosphere.

Factor II: Social-emotional Concerns. This factor reflects the rated belief of teachers that dealing with the social-emotional needs of the pupils is the most important function of school and will greatly enhance learning.

Factor III: Integrative Learning. This factor is similar to the Wehling and Charters factor of the same name in its emphasis on the practical applications of skills learned in the classroom and the focus on meanings instead of facts. high score on this factor also reflects an interest in accommodating individual differences in learning.

Factor IV: Role Separation. Items loading on this factor reflect teachers' belief in maintaining a certain social distance between themselves and their pupils and not becoming involved in the interpersonal affairs of the class. Wehling and Charters identified a similar dimension which they call Emotional Disengagement. A high score on this factor implied a belief that adequate role separation will provide a climate more "conducive to learning" (Wehling and Charters, p. 13). Means, standard deviations and the intercorrelations among the four factors are included in Table 2.

As has been noted in Emmer and Evertson (Note 3), what we call management effectiveness is complex and should be measured by a combination of process and product variables rather than a single

outcome such as student achievement or on-task behavior; Hence a combination of these variables was used to determine our more-and less-effective managers. Similarly, it is logical to believe that a teacher's belief system is a composite of the four teacher belief factors. The question, then, was to determine what was the relationship between teacher beliefs and management effectiveness in this study.

The relationship between teacher beliefs and management effectiveness was investigated by performing a canonical correlation analysis. A canonical correlation analysis is a statistical procedure used to define the primary composite dimensions which relate one set of variables to another set of variables. This method can be used to answer questions as to how two sets of variables are related and how strong that relationship is (Veldman, 1967). The four teacher belief factors were used as one set of variables, and the management effectiveness criteria were used as the other set of variables. The management effectiveness criteria used for the canonical analysis were combined class mean adjusted residual achievement gains; combined class mean student ratings of teachers, mean teacher academic on-task behavior; mean teacher off-task, unsanctioned behavior; and an observer rating of teacher management.

The first canonical relationship between the set of teacher beliefs and the management effectiveness criteria was statistically significant. Based on the loadings presented in Table 3, high role separation, high integrative learning, and low social-emotional concerns are related to high academic on-task behavior, high residual achievement gain, and low ratings of teachers by students. Another way of saying this is that teachers in our study who were high in social-emotional concerns, and

low in role separation and integrative learning were likely to have high student ratings, but low academic on-task behavior and low residual achievement gains.

The canonical analysis, while reflecting a significant relationship, does not imply that there are identifiable subgroups of teachers who possess beliefs commensurate with the weights. To determine whether or not there were some teachers who could be grouped empirically that reflect the different combinations of these beliefs, a cluster analysis was performed using the standardized scores on the four teacher belief factors for all 51 teachers. The criterion used to determine group membership was the Euclidean distance function (Veldman, 1967). As Veldman suggested, groups were defined by inspecting the increase in the within group variance for various numbers of groups. Three groups of teachers emerged and were defined by the dimensions listed in Table 4.

The first group was primarily characterized by low scores on Role Separation and high scores on Social-emotional Concerns. The second group was defined by high scores on Role Separation and Teacher Control. These two groups are consistent with the findings of the canonical analysis described earlier. Group 1 teachers expressed a belief that dealing with the social-emotional needs of the pupils was very important and they were not reluctant to get personally involved with their pupils. Group 2 teachers, on the other hand, expressed a belief in maintaining some social distance between the teacher and the pupils and in strong teacher control over the classroom and the learning process. This group also had moderate scores on Integrative Learning and

Social-emotional Concerns. Group 3 is defined more in the absence of positive characteristics. Teachers in Group 3 had low scores on both Social-emotional Concerns and Teacher Control.

Table 5 shows the distribution of math and English teachers in the three groups. More-effective managers are identified by a square and less-effective managers by a circle. These more- and less-effective teacher groups are those identified in Emmer and Evertson (Note 3). Group 1 (the high social-emotional concerns group) had five less-effective managers and no more-effective managers. In Group 2 (the high teacher control group) there were eight more-effective managers and two less-effective managers. In Group 3, there were five more-effective and six less-effective managers. A chi-square test was done on the distribution of more- and less-effective managers within the three groups, and was significant ($x^2 = 8.69$, $\underline{df} = 2$, $\underline{p} < .05$). Examination of the distribution revealed that a disproportionate number of less-effective managers appeared in Group 1 and a disproportionate number of more-effective managers appeared in Group 2.

Since the defining beliefs of Group 1 included low Role Separation and high Social-emotional Concerns, the canonical analysis predicted that some of our less-effective managers would appear in that group, and likewise few or none of our more-effective managers. Group 2 appeared to reflect the other end of the relationship expressed in the canonical analysis, although the emphasis on Teacher Control beliefs was not predicted. The relationship between high role separation, high academic on-task behavior, and high residual achievement gain appeared to be reflected in the fact that eight more-effective managers appeared in this group, while only two less-effective managers appeared here.

Group 3, on the other hand, had roughly an equal number of more- and less-effective managers, showing that the profile of these teachers' beliefs did not distinguish between more- and less-effective managers. One possible explanation for the make-up of Group 3 is that these teachers responded to the items on the inventory according to a particular response set.

In an effort to discover more specific information about the teachers in Group 3, standardized T scores were created for all more- and less-effective managers, as shown in Tables 6 and 7. Examination of the tables indicates that Group 3 teachers, on the whole, had much lower Social-emotional Concerns scores than Group 1, and, for the most part, Group 2. These teachers also had lower Teacher Control scores. Individual scores, however, with only three exceptions, revealed that more-effective managers had higher scores than less-effective managers on the Teacher Control factor.

The fact that most of the more-effective English teachers expressed a belief in task-orientation and teacher control is contradictory to information collected in the Texas Junior High School Study (Evertson, Anderson, Anderson, and Brophy, in press). Teacher self-report data from that study showed that math teachers who were very demanding and task-oriented were academically more effective and received high student ratings, whereas English teachers who were very demanding and task-oriented were "academically no more effective than other teachers, and they tended to be less popular among their students" (Evertson, Anderson and Brophy, Note 2, p. 14). This study supported the notion that "a highly demanding, task-oriented atmosphere is justified when there is consensus among the teachers and students about the goals of

instruction and the value of that instruction" (p. 14). The implications from that study might be that English teachers who are task-oriented and demanding of their students are neither academically more effective nor better respected by their students, or it could be a reflection of the lack of consensus between English teachers and their students about the goals and value of English instruction. It is likely, however, that since these findings were based on individual items of teacher belief correlated with achievement and attitude, the true relationship between task-orientation and effective English teaching was masked.

The more-effective English teachers in the present study appear to be more demanding and task-oriented than either the less-effective English teachers or math teachers. Based on this teacher self-report data, it would appear that many English teachers in the JHCOS, particularly the more-effective English teachers, might perceive their subject matter as highly structured or as needing more structure due to the nature of the content. English teachers must include such diverse areas of content as spelling, grammar, literature, and composition in their curriculum, and the sequencing of this content is less specified and less structured than for some other subjects. More-effective English teachers were evidently more successful in creating and maintaining the structure and task-orientation in their classrooms, thereby becoming academically more effective. Their positive ratings by students possibly reflected their ability to convey to students the value of English instruction, something which the task-oriented English teachers in the Texas Junior High School Study were perhaps unable to do.

If the results of this study reflect a causal relationship, then it would appear that a particular pattern of beliefs (that is, high social-emotional concerns, low role separation) may be detrimental to management effectiveness. Since more-effective managers in Group 2 had moderate belief scores on the Social-emotional Concerns factor, it would appear that expression of social-emotional concerns is not undesirable if tempered with higher role separation.

These results may reflect a teacher's concern about management problems since these reports were obtained in May, at the end of the school year. While Charters (Note 1) reported stability for some dimensions of teacher beliefs over a six month period ending in April, it could be that the teachers' scores reflect problems or situations in their environment which might have had an effect on their beliefs about teaching through the school year. There is reason to believe that these scores are fairly stable, however, since most of the teachers in the study were experienced and probably had stable beliefs prior to the beginning of school.

The results of this study appear to indicate that teacher beliefs predict classroom processes and outcomes, but not in a simple fashion. The clearest result was a relationship between a composite of several beliefs (namely, high role separation, high integrative learning, and low social-emotional concerns) and certain processes and outcomes (such as high academic on-task behavior, high achievement, and low student ratings of teacher). This study would suggest that a profile of teacher beliefs can be helpful in predicting teacher behavior and management effectiveness.

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Table 1

Items Having Significant Loading on the Teacher Belief Factors

Item Number	Loading	Item Description
Factor I: Classroom Order, Teacher-directed Learning		
7	.6374	Pupils learn to stay alert when they are expected to respond immediately to teacher directions.
24	.6238	Optimum learning takes place when the classroom setting is completely free of distractions.
29	.6180	The effective teacher has complete control of the learning situation at all times.
1	.5966	Teaching of specific skills and factual subject matter is the most important function of the school.
Factor II: Social-emotional Concerns		
2	.6279	The teacher assures optimum learning conditions by giving top priority to the social-emotional needs of the pupils.
20	.6367	The effectiveness of the teacher depends entirely on the amount of personal interest he can invest in the progress of each pupil.
11	.5891	The development of social and emotional security for pupils is the most important function of the school.
Factor III: Integrative Learning		
18	.6256	The basic function of education is fulfilled only when pupils are led to understand the general significance of the material they have learned.
28	.6125	Pupils master the essentials of a subject only when extensive plans are made for accommodating individual differences in pupils.
26	.5861	In planning their work teachers should rely heavily on the knowledge and skills pupils have acquired outside the classroom.
Factor IV: Role Separation		
22	.6274	Teacher effectiveness is seriously impaired when the teacher permits himself to become emotionally involved in the personal problems of pupils.
33	.5782	A good teacher will establish a routine and stick to it.
14	.4468	Pupils are induced to greater motivation when the teacher remains somewhat aloof from the interpersonal affairs of the class.

Table 2

Means, Standard Deviations, and Intercorrelations

Among the Four Teacher Belief Factor Scores

	Factor I	Factor II	Factor III	Factor IV
Means	39.71	18.06	18.73	11.35
Sigmas	5.65	3.47	2.90	2.48
Number of Comprising Items	11	7	6	4
Intercorrelation Matrix	1	2	3	4
1	1.0000	-.1432	.2136	.0074
2		1.0000	-.1912	.1504
3			1.0000	.0815
4				1.0000

Table 3

Canonical Analysis: Teacher Beliefs vs.

Teacher Effectiveness Criteria

Teacher Beliefs	Correlations with Canonical Variable		Teacher Effectiveness Criteria
Canonical Function (chi-square = 24.29, d.f. = 8, p = .0024) canonical r = .65			
Teacher Control	.18	.01	Observer Ratings of Teacher Management
Social-Emotional Concerns	-.59	-.41	Mean Student Ratings of Teacher
Integrative Learning	.42	.42	Adjusted Residual Achievement Gain
Role Separation	.71	-.08	Off-task, Unsanctioned Behavior
		.69	On-task, Academic Behavior

Table 4

Teacher Belief Cluster Analysis Profiles*

Group 1		
	-1.17	Role Separation
	.75	Social-emotional Concerns
	-.17	Integrative Learning
	-.08	Teacher Control
Group 2		
	.64	Role Separation
	.56	Teacher Control
	.35	Integrative Learning
	.33	Social-emotional Concerns
Group 3		
	-.91	Social-emotional Concerns
	-.57	Teacher Control
	-.27	Integrative Learning
	.13	Role Separation

*These profiles are of standardized group means.

Table 5

Distribution of Teachers According to the

Teacher Belief Cluster Analysis

Group 1[a]		Group 2[b]		Group 3[c]	
English	Math	English	Math	English	Math
◯ T	◯ T	□ T	□ T	□ T	□ T
◯ T	◯ T	□ T	□ T	◯ T	□ T
T	◯ T	□ T	◯ T	◯ T	□ T
T	T	□ T	T	◯ T	□ T
T	T	□ T	T	◯ T	◯ T
T	T	□ T	T	T	◯ T
	T	◯ T	T	T	T
	T	T			T
		T			T
		T			T
		T			T
		T			

[a]Group 1 - Low Role Separation, High Social-emotional Concern

[b]Group 2 - High Role Separation, High Teacher Control

[c]Group 3 - Low Social-emotional Concerns, Low Teacher Control

□ indicates more effective managers

◯ indicates less effective managers

Table 6

Profile Scores* for More- and Less-Effective Managers of Mathematics Classes

Factor	Teacher	Group 1[a] I	II	III	IV	Teacher	Group 2[b] I	II	III	IV	Teacher	Group 3c I	II	III	IV
More						A	52.3	44.4	54.4	52.6	C	52.3	38.6	57.8	52.6
						X	61.1	67.5	75.1	52.6	H	50.5	41.5	44.1	52.6
											K	29.3	50.2	51.0	68.7
											L	54.1	35.7	44.1	48.6
Less	E	39.9	50.2	51.0	36.5	D	59.4	67.5	71.6	52.6	G	38.1	35.7	47.5	56.6
	P	47.0	55.9	37.2	36.5						T	31.1	38.6	47.5	60.7
	Q	48.8	55.9	51.0	40.5										

*These are standardized T scores

[a]Group 1 - Low Role Separation, High Social-emotional Concern

[b]Group 2 - High Role Separation, High Teacher Control

[c]Group 3 - Low Social-emotional Concerns, Low Teacher Control

Table 7

Profile Scores* for More- and Less-Effective Managers of English Classes

Factor	Teacher	Group 1[a] I	II	III	IV	Teacher	Group 2[b] I	II	III	IV	Teacher	Group 3[c] I	II	III	IV
More						F	54.1	55.9	51.0	48.6	Y	38.1	44.4	54.4	56.6
						I	62.9	50.2	51.0	52.6					
						O	61.1	55.9	61.3	60.7					
						U	64.7	50.2	75.1	60.7					
						V	50.5	47.3	54.4	48.6					
						Z	61.1	53.0	54.4	52.6					
Less	R	62.9	64.6	61.3	32.5	J	57.6	41.5	40.6	64.7	B	41.7	47.3	61.3	56.6
	W	52.3	58.8	51.0	40.5						M	66.4	32.9	33.7	52.6
											N	38.1	35.7	37.2	48.6
											S	41.7	47.3	61.3	56.6

*These are standardized T scores.

[a]Group 1 - Low Role Separation, High Social-emotional Concern

[b]Group 2 - High Role Separation, High Teacher Control

[c]Group 3 - Low Social-emotional Concerns, Low Teacher Control

Appendix A

Educational Opinion Survey

IV. Educational Opinion Survey

The following questionnaire is designed to elicit your opinions about teaching and its methods and goals. There is considerable disagreement about these, and thus there are no "correct" answers. Please give your own opinion about the statements. Read each statement and decide how YOU feel about it. Then mark your answers on the space provided.

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. Teaching of specific skills and factual subject matter is the most important function of the school.	___	___	___	___	___
2. The teacher assures optimum learning conditions by giving top priority to the social-emotional needs of the pupils.	___	___	___	___	___
3. A properly motivated group of mature students might learn more in a semester's time if they were left entirely to their own resources than if they had a teacher to guide them.	___	___	___	___	___
4. A firm hand by the teacher promotes emotional security for pupils.	___	___	___	___	___
5. A teacher's effectiveness rests upon his ability to maintain proper "professional distance" between the pupils and himself.	___	___	___	___	___
6. The effectiveness of teaching is enhanced when the teacher has the ability to see the world as each of his pupils sees it.	___	___	___	___	___
7. Pupils learn to stay alert when they are expected to respond immediately to teacher directions.	___	___	___	___	___

Teacher # ___

School # ___

		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
8.	Pupils respect teachers who expect them to work hard in school.	___	___	___	___	___
9.	Pupils never really understand a subject until they can relate what they have learned to the broader problems of the world.	___	___	___	___	___
10.	The over-all plan of education suffers when teachers depart substantially from the subject outline.	___	___	___	___	___
11.	The development of social and emotional security for pupils is the most important function of the school.	___	___	___	___	___
12.	Across-the-school routine imposes a consistency in classroom procedure which tends to restrict important avenues for learning.	___	___	___	___	___
13.	Pupils must be kept busy or they soon get into trouble.	___	___	___	___	___
14.	Pupils are induced to greater motivation when the teacher remains somewhat aloof from the interpersonal affairs of the class.	___	___	___	___	___
15.	Good rapport with pupils is maintained by the teacher who always finds time to help individuals with special problems.	___	___	___	___	___
16.	Proper control of a class is amply demonstrated when pupils work quietly while the teacher is out of the room.	___	___	___	___	___
17.	Lessons presented in the form of problems to be solved are the best means of motivating pupils.	___	___	___	___	___

Teacher # ___
School # ___

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
18. The basic function of education is fulfilled only when pupils are led to understand the general significance of the material they have learned.	___	___	___	___	___
19. The structure of a field of knowledge is intrinsically interesting to pupils when it is clearly taught.	___	___	___	___	___
20. The effectiveness of the teacher depends entirely on the amount of personal interest he can invest in the progress of each pupil.	___	___	___	___	___
21. Pupils learn best when permitted to set their own pace in doing the work.	___	___	___	___	___
22. Teacher effectiveness is seriously impaired when the teacher permits himself to become emotionally involved in the personal problems of pupils.	___	___	___	___	___
23. Learning is enhanced when teachers praise generously the accomplishments of pupils.	___	___	___	___	___
24. Optimum learning takes place when the classroom setting is completely free of distractions.	___	___	___	___	___
25. Pupils respect teachers who stand firm on their convictions.	___	___	___	___	___
26. In planning their work teachers should rely heavily on the knowledge and skills pupils have acquired outside the classroom.	___	___	___	___	___

Teacher # ___
School # ___

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
27. The essential function of junior high school courses lies in their preparing pupils for later courses.	___	___	___	___	___
28. Pupils master the essentials of a subject only when extensive plans are made for accommodating individual differences in pupils.	___	___	___	___	___
29. The effective teacher has complete control of the learning situation at all times.	___	___	___	___	___
30. The natural flow of events is enhanced by the teacher who manages to eliminate any inappropriate pupil behavior.	___	___	___	___	___
31. An essential component of a good lesson is one of showing how it is related to other areas of knowledge.	___	___	___	___	___
32. A good teacher will establish a routine and stick to it.	___	___	___	___	___